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EXAMINER	
PHAM, TIMOTHY X	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/581,207	MAYER ET AL.	
	Examiner	Art Unit	
	TIMOTHY PHAM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-19,21-26,34 and 37-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-19,21-26,34 and 37-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 June 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/31/2008 have been fully considered but they are not persuasive.

On page 18, 2nd paragraph, of Applicant Response, the Applicant arguments that "Phan-Anh does not disclose that "when the first network element is determined to be out of service, drop a bearer for signalling between the apparatus and a communications network comprising the first network element", as recited, in part, in independent claim 25 and similarly in independent claims 26, 43 and 45". In response, the Examiner respectfully disagrees. During patent examination, the claim must be given their broadest reasonable interpretation consistent with the specification. See MPEP 2111. The terms "drop a bearer for signalling between the apparatus and a communications network" as claimed, therefore, it is broadly interpreted. Phan-Anh does not explicitly teach that dropping a bearer for signalling between the apparatus and a communications network comprising the first network element. But, Phan-Anh teaches the new bearer must be established or the subscriber must be re-allocated to another S-CSCF, when a first S-CSCF serving a subscriber fails or goes otherwise out of service (page 4 lines 23 through col. 5 line 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that when the first network element is determined to be out of service, drop a bearer for signalling between the apparatus and a communications network comprising the first network element.

On page 21, 2nd paragraph, of Applicant Response, the Applicant arguments that "the combination of Phan-Anh and 3GPP, taken individually or in combination, fail to disclose or

suggest that subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type". In response, the Examiner respectfully disagrees. Regarding claim 3 (filed in 06/01/2006), the limitation of claim 3 claim " subsequent to receiving the error message at the user equipment (see 3GPP: page 18, section 2 and Fig. 5.6, reference "SIP Response", e.g., in case of failure an appropriate SIP error message is returned), sending a second message of a second type different from the type of the first message to initiate a registration from the user equipment to the first network element (see Phan-Anh: page 6, lines 21-23; page 10, lines 10-14) ". Therefore, rejections of these limitations are maintained.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a processor" in claims 19, 21, and 25 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Regarding claims 19, 21, and 25, the limitation "a processor configured to" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does disclose a mobile station is provided with a processor entity (see e.g., Specification: paragraph [0082]), but the disclosure fails to specifically disclose " a processor configured to receive a first message from a user equipment; forward the first message to a serving network element; detect that the serving network element is out of service; determine a type of the first message; and in dependence on the type of the first message received from the user equipment send an error message to the user equipment".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 25-26, 37-38, 43, and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Phan-Anh (cited in PTO-892; Part of Paper No. 20080912).

Regarding claims 25-26, and 43, Phan-Anh discloses an apparatus (Fig. 2, reference 1) and a method receiving at a user equipment, comprising:

a processor (page 4, noted the controller) configured to determine that a first network element (Fig. 2, reference 22 or 23, either alone or in combination) in a communications network is out of service (page 4, lines 25-30; page 14, lines 16-28) by sending a request to the first network element and determining that no response has been received from the first network element (page 14, lines 20-22); and

when the first network element is determined to be out of service (page 4, lines 25-30; page 14, lines 16-28), drop a bearer for signalling between the apparatus and a communications network comprising the first network element (page 4 line 23 through page 5 line 4),

discover or select a second network element (page 4, line 29; page 14, lines 24-25, e.g., select new S-CSCF2), and

send to the second network element a message comprising an initial request for registration at the communications network (page 6, lines 21-23).

Regarding claims 37 and 38, Phan-Anh discloses an apparatus and a method according to claims 25 and 26 respectively above, wherein the bearer for signalling comprises a signalling (page 9, lines 21-23) or general purpose packet data protocol context bearer (Noted that this limitation is skip due to the alternative claim).

Claim 45 is drawn to a computer readable medium configured to store instructions of a computer program that when executed controls a processor to perform steps of claim 25 above. Therefore, the same rationale applied to claim 25 applies. In addition, Phan-Anh inherently discloses a computer program product, i.e., given that Phan-Anh discloses a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 3-15, 17, 19, 21-24, 34, 39-42, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phan-Anh, and further in view of 3GPP (cited in PTO-892; Part of Paper No. 20080912).

Regarding claims 1, 19, 34, 41-42, Phan-Anh discloses a method, an apparatus, and a system:

receiving at a first network element in a communications network a first message from a user equipment (Fig. 3, reference 1; page 10, lines 26-32);

transmitting the first message from the first network element to a serving network element (Fig. 3, reference 6; page 11, lines 26-27, e.g., registration from the second controller entity 23);

detecting at the first network element that the serving network element is out of service (page 4, lines 25-30; page 11, lines 9-13);

receiving a second message from the user equipment of a second type different from the first message type (page 6, lines 21-23; page 10, lines 10-14).

Phan-Anh fails to specifically disclose determining at the first network element the type of the first message; in dependence on the type of the first message sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service; and subsequent to sending the error message to the user equipment.

However, 3GPP discloses determining at the first network element the type of the first message (page 18, section 2, note that the "SIP request" is acknowledge by the "SIP Response");

in dependence on the type of the first message sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service (page 18, section 2 and Fig. 5.6, reference "SIP Response", e.g., in case of failure an appropriate SIP error message is returned); and

subsequent to sending the error message to the user equipment (page 18, section 2 and Fig. 5.6, reference "SIP Response", e.g., in case of failure an appropriate SIP error message is returned).

Therefore, taking the teachings of Phan-Anh in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have determining at the first network element the type of the first message; and in dependence on the type of the first message sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service, and subsequent to sending the error message to the user equipment to enhance managing communications over a network.

Claim 44 is drawn to a computer readable medium configured to store instructions of a computer program that when executed controls a processor to perform steps of claim 1 above. Therefore, the same rationale applied to claim 1 applies. In addition, Phan-Anh inherently discloses a computer program product, i.e., given that Phan-Anh discloses a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

Regarding claim 3, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the second message is configured to initiate a registration from the user equipment to the first network element (Phan-Anh: page 6, lines 21-23).

Regarding claim 4, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein a bearer for signaling is established between the user equipment and the communications network prior to the receiving of the first message (Phan-Anh: page 9, lines 24-28).

Regarding claim 5, Phan-Anh in combination of 3GPP discloses a method according to claim 4 above, further comprising forwarding the first message to a further serving network element (Phan-Anh: Fig. 3, reference 6; page 11, lines 26-27, e.g., registration from the second controller entity 23).

Regarding claim 6, Phan-Anh in combination of 3GPP discloses a method according to claim 5 above, wherein the further serving network element registers the user equipment (Phan-Anh: page 5, lines 16-18; page 8, lines 29-32).

Regarding claim 7, Phan-Anh in combination of 3GPP discloses a method according to claim 4 above, wherein the bearer for signalling comprises a signalling (page 9, lines 21-23) or general purpose packet data protocol context bearer (Noted that this limitation is skip due to the alternative claim).

Regarding claim 8, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the communications network is an internet protocol multimedia subsystem network (Phan-Anh: pages 5, lines 8-9).

Regarding claim 9, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the first network element is-comprises an interrogating call session control function (Phan-Anh: Fig. 2, reference 31, page 2, lines 22-23).

Regarding claim 10, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the first network element comprises a proxy call session control function (Phan-Anh: Fig. 2, reference 30, page 2, lines 20-23).

Regarding claim 11, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the serving network element comprises a serving call session control function (Phan-Anh: Fig. 2, references 22 and 23, pages 23-24).

Regarding claim 12, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the determining of the type of the first message comprises evaluating content of a predefined information element in the first message (3GPP; page 18, section 2, note that the "SIP request" is acknowledge by the "SIP Response").

Therefore, taking the teachings of Phan-Anh in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the determining of the type of the first message comprises evaluating content of a predefined information element in the first message for advantages of enhancing managing communications over a network.

Regarding claim 13, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the detecting at the first network element that the serving network element is out of service (Phan-Anh: page 4, lines 23-32; page 14, lines 16-28), comprises:

detecting that a predetermined time period has passed since the forwarding of the message from the first network element to the serving network element and before a response has been received from the serving network element and/or determining that the first message has been transmitted a predetermined number of times (3GPP: page 26; sections 5.1.2.2.1 in its entirety).

Therefore, taking the teachings of Phan-Anh in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to detect that the serving network element is out of service by detect that a predetermined time period has passed since the forwarding of the message from the first network element to the serving network element and before a response has been received from the serving network element and/or determining that the first message has been transmitted a predetermined number of times for the advantages of promptly taking the appropriate action.

Regarding claim 14, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the type of the first message comprises a re-registration request (Phan-Anh: page 6, lines 21-23; page 17, claim 4).

Regarding claim 15, Phan-Anh in combination of 3GPP discloses a method according to claim 1 above, wherein the type of the second message comprises an initial registration request (Phan-Anh: page 6, lines 21-23).

Regarding claim 17, Phan-Anh in combination of 3GPP discloses a method according to claim 12 above, wherein the information element indicates that a user has been successfully authenticated (Phan-Anh: page 3, lines 12-16).

Regarding claims 21 and 39, Phan-Anh discloses an apparatus and a method, comprising: a processor (page 4, noted the controller), but Phan-Anh fails to specifically disclose receiving an error message from a first network element in a communications network, the error message indicating that a serving network element for the apparatus is out of service, and in response to

the error message to send a further message of a second type different from the first type to the first network element.

However, 3GPP discloses receiving an error message from a first network element in a communications network (page 18, section 2 and Fig. 5.6, reference "SIP Response", e.g., in case of failure an appropriate SIP error message is returned), the error message indicating that a serving network element for the apparatus is out of service (page 18, section 2 and Fig. 5.6, reference "SIP Response", e.g., in case of failure an appropriate SIP error message is returned), and in response to the error message to send a further message of a second type (see 3GPP: page 17, Fig. 5.5, reference "8. 200 OK") different from the first type to the first network element page 15, Fig. 5.3, reference "1 INVITE").

Therefore, taking the teachings of Phan-Anh in combination of 3GPP as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to receive an error message from a first network element in a communications network, the error message indicating that a serving network element for the apparatus is out of service, and in response to the error message to send a further message of a second type different from the first type to the first network element for advantages of promptly taking the appropriate action.

Regarding claim 22, Phan-Anh in combination of 3GPP discloses an apparatus according to claim 21 above, wherein the processor is further arranged to
establish a bearer for signalling between the apparatus and a communications network comprising said first network element and said serving network element (Phan-Anh: page 4 line 23 through page 5 line 4), and respond to the error message by dropping the bearer for signalling

between the apparatus user equipment and the communications network (Phan-Anh: page 4 line 23 through page 5 line 4).

Regarding claim 23, Phan-Anh in combination of 3GPP discloses an apparatus according to claim 22 above, wherein the bearer for signalling is-comprises a signaling (Phan-Anh: page 9, lines 21-23) or general purpose POP-packet data protocol context bearer (Noted that this limitation is skip due to the alternative claim).

Regarding claim 24, Phan-Anh in combination of 3GPP discloses an apparatus according to claim 21 above, wherein the type of the further message sent to the first network element comprises an initial registration request (Phan-Anh: page 6, lines 21-23).

Regarding claim 40, Phan-Anh in combination of 3GPP discloses a method according to claim 39 above, wherein the further message is configured to initiate a registration from the user equipment to the first network element (Phan-Anh: page 6, lines 21-23).

8. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phan-Anh and 3GPP as applied to claim 12 above, and further in view of Costa-Requena (cited in PTO-892; Part of Paper No. 20080912).

Regarding claim 16, the combination of Phan-Anh and 3GPP discloses a method according of claim 12 above, fails to specifically disclose wherein the information element indicates that the request is sent integrity protected.

However, Costa-Requena discloses wherein the information element indicates that the request is sent integrity protected (paragraph [0062], e.g., both authentication and message integrity protection is used).

Therefore, Phan-Anh in combination with 3GPP and Costa-Requena as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the information element indicates that the request is sent integrity protected to provide authorizations and authentication for an IP Multimedia Subsystem (IMS) (Costa-Requena: paragraph [0001]).

Regarding claim 18, the combination of Phan-Anh and 3GPP discloses a method according of claim 12 above, fails to specifically disclose wherein the information element in the first message is an integrity protected flag in an authorization header of the first message.

However, Costa-Requena discloses wherein the information element in the message is an integrity protected flag in an authorization header of the message (paragraphs [0062],[0063]).

Therefore, Phan-Anh in combination with 3GPP and Costa-Requena as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the information element in the message is an integrity protected flag in an Authorization header of the message to provide authorizations and authentication for an IP Multimedia Subsystem (IMS) (Costa-Requena: paragraph [0001]).

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
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